

Customer No.: 31561
Docket No.: 5486-US-PA
Application No.: 10/065,091

REMARKS

Present Status of the Application

This is a full and timely response to the outstanding non-final Office Action mailed on October 23, 2006. The Office Action has rejected claims 1-5, 7-12, and 56-61 under 35 U.S.C. 102(e) as being anticipated by and has rejected claim 13 under 35 USC 103(a) as being unpatentable over Tanada et al. (Tanada hereinafter, US Publication 2002/0054257). The Office Action has also rejected claim 6 under 35 U.S.C. 103(a), as being unpatentable over Tanada in view of Nakai et al. (Nakai, hereinafter, U.S. Patent No. 6,144,429).

In this response, claims 1 and 56 have been amended, claim 13 has been cancelled and claim 62 has been added to more accurately describe the present invention. Upon entry of the amendments, claims 1-5, 7, 10, 11, 24-33, 44-59 and 62 remain pending. It is believed that no new matter is added by way of these amendments made to the claims or otherwise to the application.

After carefully considering the remarks set forth in this Office Action and the cited references, it is strongly believed that the cited references are deficient to adequately teach the claimed features as recited in the amended claims. The reasons that motivate the above position of the Applicants are discussed in detail hereafter, upon which reconsideration of the claims is most earnestly solicited.

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Discussion of Office Action Objections and Rejections

The Office Action has objected claims 1 and 56 as having limitations drawn to a non-elected species.

More specifically, the Office Action asserts that the newly added limitations drawn to a color filter layer on the first substrate wherein the first transparent conductive layer is conformably over the color filter layer are non-elected species.

Regarding the issue of non-elected species, the undersigned had conducted a telephonic interview with Examiner Rude on June 21, 2007, during which the appropriate claim language was discussed. After reviewing the discussion with the examiner on this issue of non-elected species, Applicants have amended claims 1 and 56 to recite "...the dielectric layer is a color filter layer....", and have cancelled claims 13. Applicants believe such an amendment would have rendered the objections moot. Reconsideration and withdrawal of the objections are courteously requested.

The Office Action has rejected claims 1-5, 7, 10-11 and 56-59 under 35 U.S.C. 103(a), as being unpatentable over Tanada et al. (U.S. Publication No. 2002/0054257; hereafter Tanada) in view of Nakai et al. (US Patent 6,144,429, hereinafter Nakai)

To establish a prima facie case of obviousness under 35 U.S.C § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must

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be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. See MPEP § 2143.

The Examiner failed to establish prima facie obviousness in rejecting independent Claims 1 and 56 because Tanada and Nakai, taken alone or combined, fail to teach or suggest, among other things, “*...a transparent dielectric layer over the conformal reflective layer, wherein the dielectric layer is a color filter layer that has a smoother upper surface than the organic insulating layer and is in full contact with the conformal reflective layer; and a first transparent conductive layer conformably over the dielectric layer layer which is the color filter layer, wherein the first transparent conductive layer is connected to a thin film transistor for controlling the liquid crystal layer and the conformal reflective layer is electrically isolated from the first transparent conductive layer...*

The Office asserts that Tanaka teaches a transparent dielectric layer 14 over the conformal reflective layer 12, wherein the dielectric layer has a substantially planar surface (smoother upper surface than that of the organic insulating layer) and a first transparent conductive layer over the transparent dielectric layer wherein the conformal reflective layer 12 is electrically isolated from the first transparent conductive layer 15, wherein the transparent dielectric layer includes a color filter layer 13. Applicants respectfully disagree. As being clarified in claims 1 and 56, the transparent dielectric

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layer of the instant case is a color filter layer. Hence, it is the color filter layer that has a planar upper surface for planarizing the reflective layer and is in full contact with the conformal reflective layer. On the other hand, Tanaka teaches that chunks of color filters 13 are formed on the reflection film 12, in which portions of the reflection film 12 are exposed by the gaps between the chunks of color filters. Accordingly, not only the color filters of Tanaka are not in full contact with the underlying reflection film 12, an application of an additional overcoat film 14 is required to deposit over the color filters to provide the planarization of the corrugation due to the organic film 11 and the color filters 13 (See [0035]). Therefore, contrary to the office's assertion, Tanaka fails to teach or suggest the claim invention at least in these regards.

Although the Office recognizes that Tanada fails to disclose that the first conductive layer is connected to the TFT for controlling the liquid crystal layer, the Office has made another assertion that Nakai teaches the missing features and that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Tanada's teaching with the first conductive layer 14 connected to the TFT 19 through the contact hold 22 and the source electrode 25 for controlling the liquid crystal in order to provide a high efficiency of light utilization ... (see page 6-7 of the Office Action). Applicants again disagree with the Office's allegation.

Tanada basically teaches a passive LCD device which comprises a grid of conductors with pixels located at each intersection in the grid and current is sent across two conductors on the grid to control the light for any pixel. The passive device of Tanada

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does not operate through any TFT. On the other hand, Nakai teaches an active matrix that includes a TFT located at each pixel intersection. Further, in order for Tanada to connect to a TFT, a contact hole must be formed in the overcoat film 14, the reflection film 12, the color filters 13 and the organic film 11 of the passive LCD device of Tanada to expose a TFT, which would render Tanada's passive LCD device to operate improperly.

Additionally, the present invention teaches that the first transparent conductive layer is connected to the thin film transistor through a contact hole formed in the color filter layer. Although Nakai may have suggest a contact hole, the alleged contact hole 22 is formed in a scattering layer 15 and a flattening layer 21. Neither Tanada nor Nakai has suggested or taught the first transparent conductive layer is connected to the thin film transistor through a contact hole formed in the color filter layer.

For at least these reasons, Applicants respectfully assert that Tanada and Nakai fail to teach or suggest the present invention or to render claims 1 and 56 anticipated. Since claims 1-5, 7,10-11, 56-69 are dependent claims, which further define the invention recited in claims 1 and 56, Applicants respectfully assert that these claims also are in condition for allowance. Thus, reconsideration and withdrawal of this rejection are respectively requested.

The Office Action has rejected claim 13 under 35 U.S.C. 103(a), as being unpatentable over Tanada in view of Nakai and further in view of Kaneko (US Pub 2002/0145689).

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With regard to the 103 rejections of claim 13 by Tanada in view of Nakai and further in view Kaneko, Applicants have cancelled claim 13 to render the rejection moot. Thus, reconsideration and withdrawal of this rejection are respectively requested.

Newly Added Claim

Applicants have added dependent claim 62, which is dependent from claim 1 to further narrow the scope as provided for within the disclosure. Therefore, it is submitted that claim 62 is in condition for allowance for the above reasons.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-5, 7, 10, 11, 13 and 56-59, 62 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date :

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